



**ICF International / Laboratory Data Consultants**

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MEMORANDUM

TO: Chris Lichens, Remedial Project Manager  
Site Cleanup Section 4, SFD-7-4

THROUGH: Rose Fong, ESAT Task Order Manager (TOM) *RF*  
Quality Assurance (QA) Program, MTS-3

FROM: Doug Lindelof, Data Review Task Manager *DL*  
Region 9 Environmental Services Assistance Team (ESAT)

ESAT Contract No.: EP-W-06-041  
Technical Direction Form No.: 00105041 Amendment 3

DATE: March 9, 2007

SUBJECT: Review of Analytical Data, Tier 3

Attached are comments resulting from ESAT Region 9 review of the following analytical data:

Site:	Omega Chem OU2
Site Account No.:	09 BC LA02
CERCLIS ID No.:	CAD042245001
Case No.:	Not Provided
SDG No.:	G5C040300
Laboratory:	STL Sacramento
Analysis:	N-Nitrosodimethylamine and 1,2,3-Trichloropropane
Samples:	3 Water Samples (see Case Summary)
Collection Date:	March 3, 2005
Reviewer:	Nanny Estrada, ESAT/Laboratory Data Consultants (LDC)

This report has been reviewed by the EPA TOM for the ESAT contract, whose signature appears above.

If there are any questions, please contact Rose Fong (QA Program/EPA) at (415) 972-3812.

Attachment

SAMPLING ISSUES: ☐ Yes ☒ No

## Data Validation Report – Tier 3

Case No.: Not Provided  
SDG No.: G5C040300  
Site: Omega Chem OU2  
Laboratory: STL Sacramento  
Reviewer: Nanny Estrada, ESAT/LDC  
Date: March 9, 2007

### I. CASE SUMMARY

#### Sample Information

Samples: OC2-MW10-W-0-130, OC2-MW7-W-0-131, and OC2-00-W-2-132  
Concentration and Matrix: Low Concentration Water  
Analysis: N-Nitrosodimethylamine (NDMA) and 1,2,3-Trichloropropane (1,2,3-TCP)  
Method: USEPA Method 1625, Semivolatile Organic Compounds by Isotope Dilution GC/MS  
Collection Date: March 3, 2005  
Sample Receipt Date: March 4, 2005  
Extraction Date: March 8, 2005  
Analysis Date: March 11, 2005

#### Field QC

Field Blanks (FB): OC2-00-W-2-132 (1,2,3-TCP only)  
Equipment Blanks (EB): Not Provided  
Background Samples (BG): Not Provided  
Field Duplicates (D1): Not Provided

#### Laboratory QC

Method Blanks & Associated Samples:  
G5Q4J1AA: All samples

#### Tables

1B: Data Qualifier Definitions for Organic Data Review

#### Sampling Issues

None.

#### Additional Comments

Method specific quality control (QC) limits are used to evaluate the quality of data. For QC where method does not specify limits, laboratory QC limits are used.

The raw data for the 03/10/05 initial calibration is not provided in the data package; it can be found in the G5C030251 data package.

This report was prepared in accordance with the following documents:

- USEPA Office of Water, *Method 1625C: Semivolatile Organic Compounds by Isotope Dilution GCMS*, June 1989;
- ESAT Region 9 Standard Operating Procedure 901, *Guidelines for Data Review of Contract Laboratory Program Analytical Services (CLPAS) Volatile and Semivolatile Data Packages*; and
- *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review*, October 1999.

## II. VALIDATION SUMMARY

The data were evaluated based on the following parameters:

<u>Parameter</u>	<u>Acceptable</u>	<u>Comment</u>
1. Holding Time/Preservation	Yes	
2. GC/MS Tune/GC Performance	Yes	
3. Initial Calibration	Yes	
4. Continuing Calibration	Yes	
5. Laboratory Blanks	Yes	
6. Field Blanks	Yes	
7. Matrix Spike/Matrix Spike Duplicates	N/A	
8. Laboratory Control Samples	Yes	
9. Internal Standards/Surrogates	No	A
10. Compound Identification	Yes	
11. Compound Quantitation	Yes	
12. System Performance	Yes	
13. Field Duplicate Sample Analysis	N/A	

N/A = Not Applicable

## III. VALIDITY AND COMMENTS

- A. Results for the following analytes are qualified as estimated due to internal standard/surrogate recoveries outside QC limits and should be flagged "J".
- NDMA in samples OC2-MW10-W-0-130 and OC2-MW7-W-0-131, method blank G5Q4J1AA-MB, and laboratory control sample (LCS) G5Q4J1AC-LCS
  - 1,2,3-TCP in field blank OC2-00-W-2-132

Internal standard/surrogate recoveries fell below the QC limits as shown below.

<u>Sample</u>	<u>Internal Standard</u>	<u>% Recovery</u>	<u>QC Limits</u>
OC2-MW10-W-0-130	NDMA-d6	21	25 - 150
OC2-MW7-W-0-131	NDMA-d6	21	25 - 150
OC2-00-W-2-132	1,2,3-TCP-d5	21	25 - 150

<u>Sample</u>	<u>Internal Standard</u>	<u>% Recovery</u>	<u>QC Limits</u>
G5Q4J1AA-MB	NDMA-d6	21	25 - 150
G5Q4J1AC-LCS	NDMA-d6	20	25 - 150

Results for NDMA and 1,2,3,-TCP are considered quantitatively questionable.  
Where sample results are nondetected, false negatives may exist.

## TABLE 1B

### DATA QUALIFIER DEFINITIONS FOR ORGANIC DATA REVIEW

The definitions of the following qualifiers are prepared according to the document, "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review," October 1999.

- U     The analyte was analyzed for but was not detected above the reported sample quantitation limit.
- L     Indicates results which fall below the Contract Required Quantitation Limit. Results are estimated and are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of detection.
- J     The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- NJ    The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
- UJ    The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R     The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.